

## Green mirror on bare lands: a reality?

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Globally, increasing human population growth and urbanization have imposed restrictions on the availability of arable land. The purpose of the present study was to examine the cultivation potential of serpentine soil in order to utilize the limited land resources in a beneficial way. A pot experiment with *Oryza sativa* as the test crop was carried out with five different treatments. They are soil as a control, soil with plant, soil with plant and biofilm biofertilizer (BFBF), soil with plant and chemical fertilizers (CF), soil with plant and both BFBF and CF. Eco-friendly biofilm biofertilizer and 50% of recommended chemical fertilizers for *Oryza sativa* were used in separate experimental pots in order to determine the effect of the soil on plant growth. Each treatment consisted of 3 replicates in a complete randomized design. After 46 days, plants were observed for viability and growth. The combined application of BFBF and CF over a single application showed significant improvements in soil pH, labile carbon, available nitrate, available ammonium, total length of the plants and a reduction in extractable nickel. Thus, the BFBF applied with 50% of CF may improve the soil conditions for plant growth.

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